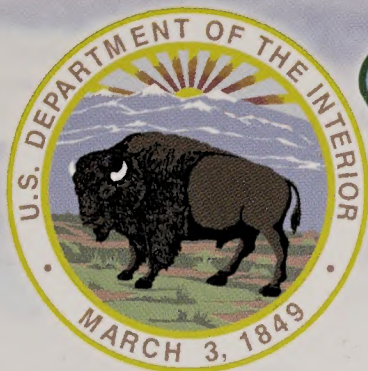


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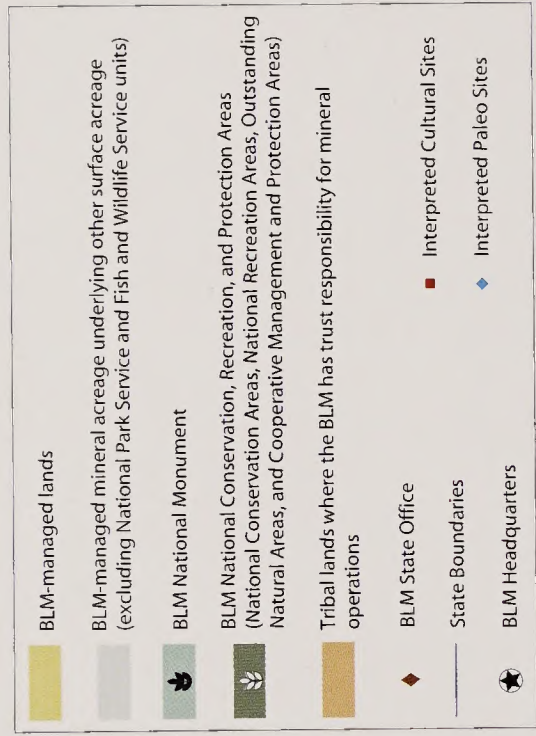
BLM

America's Priceless Heritage: Cultural and Fossil Resources on Public Lands



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Arizona
November 2003



In the Eastern United States, the BLM manages 39.7 million acres of subsurface mineral estate and 30,000 acres of surface, mostly small isolated parcels scattered throughout 31 States.

Today, the BLM administers 261 million acres of public lands located primarily in 12 Western States, including Alaska.

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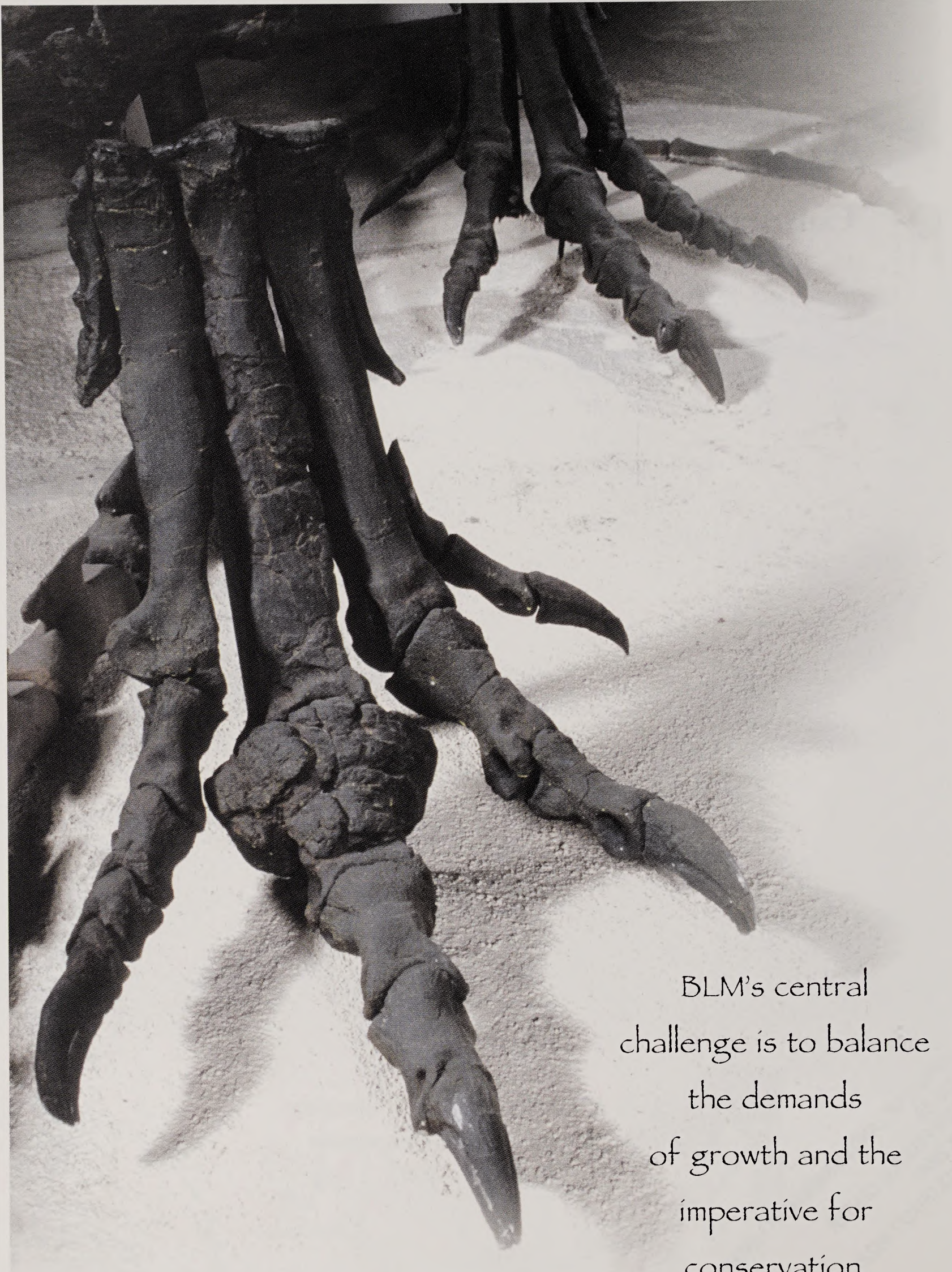
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America's Priceless Heritage:

Cultural and Fossil Resources on Public Lands

U.S. Department of the Interior
Bureau of Land Management
November 2003

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BLM's central
challenge is to balance
the demands
of growth and the
imperative for
conservation.

Preface:

An Invitation to the Reader

The Bureau of Land Management (BLM) is responsible for managing 261 million acres of public land—about one-eighth of the United States. Most of these lands are in the Western United States, including Alaska, and they include extensive grasslands, forests, high mountains, arctic tundra, and deserts. BLM also manages about 700 million acres of subsurface mineral resources, as well as numerous other resources, such as timber, forage, wild horse and burro populations, fish and wildlife habitat, wilderness areas, and archaeological, historical, and paleontological sites.

BLM administers the public lands within the framework of numerous laws, the most comprehensive of which is the Federal Land Policy and Management Act of 1976 (FLPMA). FLPMA directs BLM to follow the principle of “multiple use,” which means managing the public lands and their various resource values “so that they are utilized in the combination that will best meet the present and future needs of the American people.” This multiple use mission requires BLM to address quality of life issues, including providing clean air and water; providing recreational opportunities; protecting wildlife; and safeguarding cultural and fossil resources; as well as providing for a sound economy through the production of energy, food, and fiber and by sustaining local communities and their heritage.

Given the scope of its multiple use mission, BLM affects more Americans on a daily basis than any other land management agency. The Bureau constantly faces the challenge of ensuring a balance of land uses among perspectives that are occasionally, if not often, competing. BLM recognizes that people who live near the public lands have the most direct connection and knowledge of them, as well as a commitment to their stewardship. At the same time, the Bureau maintains a national focus because these lands belong to all Americans, whose appreciation of them continues to increase.

BLM’s central challenge is to *balance the demands of growth and the imperative for conservation*. America is entering into a new era of conservation to achieve a healthier environment and a more secure economy—what Secretary of the Interior Gale Norton





calls the “new environmentalism.” Secretary Norton sums this new environmentalism up in a visionary approach she calls the “four Cs”—using communication, cooperation, and consultation, all in the service of conservation. At the heart of the four Cs is the Secretary’s belief that for conservation to be successful, BLM must involve the people who live on, work on, and love the land.

The Bureau’s ability to partner with public land users; local residents; nonprofit groups; universities; “friends of” organizations; and State, local, and tribal governments fosters a wide and diverse support network. This network is essential not only because the agency has limited staff and budget resources, but because there is a wide variety of stakeholders who are concerned about public land management. The Bureau has been working cooperatively with partners and volunteers for decades and that work has yielded outstanding results towards attaining common goals and values.

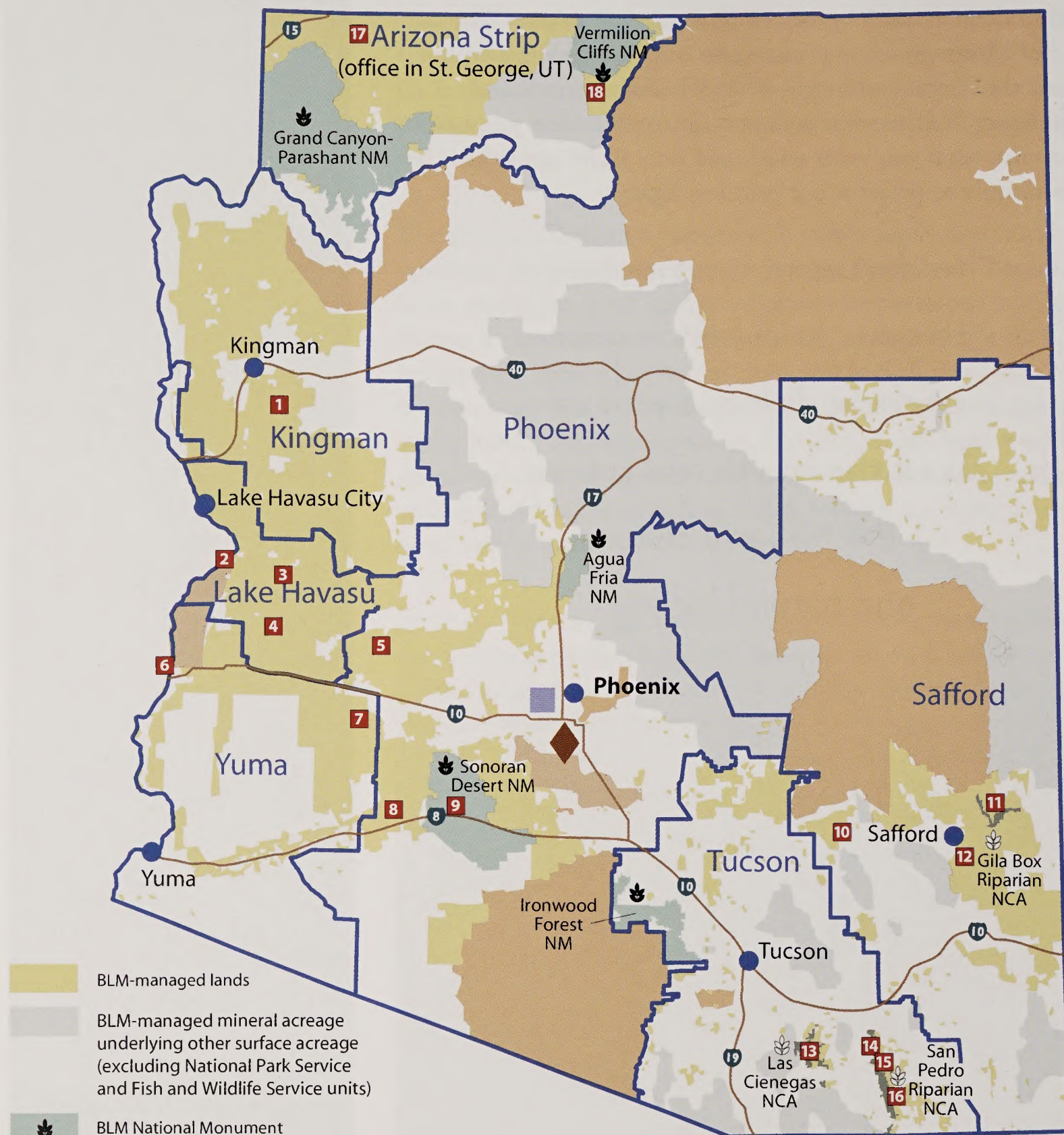
Secretary Norton’s approach to conservation is especially relevant to the management of cultural and fossil resources on public lands. These resources are a constant source of fascination for visitors. People look to these resources for recreational opportunities...for fulfilling their curiosity about the recent and remote past...for contemplating their origins...for preserving and continuing their cultures...for finding peace and quiet. The Secretary’s approach to managing these resources was furthered on March 3, 2003, when President Bush signed a new Executive Order, which directs Federal agencies to advance the protection, enhancement, and contemporary use of historic properties, particularly by seeking public-private partnerships to promote the use of such properties as a stimulus to local economic development. The Executive Order is an important component in a new White House initiative called *Preserve America*, which was announced on March 3, 2003 by First Lady Laura Bush. The *Preserve America* program will serve as a focal point for the support of the preservation, use, and enjoyment of America’s historic places.

The Bureau is proud of its mission and understands why it is crucial to the Nation’s future. The Bureau’s vision is to live up to this ambitious mission and thereby meet the needs of the lands and our people. In order to achieve this goal, the Bureau must seek new ways of managing that include innovative partnerships and, especially, a community-based focus that

involves citizen stakeholders and governmental partners who care about the public lands and the cultural and fossil resources found on them. This document is an invitation to you—the public BLM serves—to continue your ongoing dialogue with us about the health and future of the Nation's cultural and natural legacy. Tell us what is important to you, what you care most about, what you want saved, and how BLM can work collaboratively to preserve our priceless legacy.

This document is an invitation
to you...to continue your
ongoing dialogue with us
about the health and future
of the Nation's cultural
and natural legacy.





Interpreted Cultural Sites

- | | | | |
|--|--|------------------------------------|---|
| 1 Gold King Mansion | 6 Blythe Intaglios | 11 Serna Cabin | 16 Murray Springs Clovis Site |
| 2 Crossroads and Schwanbeck's Store | 7 Eagletail Petroglyphs | 12 Dankworth Indian Village | 17 Little Black Mountain Rock Art Site |
| 3 Swansea Townsite | 8 Painted Rocks Petroglyph Site | 13 Empire Ranch | 18 Dominguez-Escalante Trail |
| 4 Swansea Railroad Grade | 9 Anza National Historic Trail | 14 Santa Cruz de Terrenate | |
| 5 Harquahala Peak Observatory | 10 Turkey Creek Cliff Dwelling | 15 Fairbank | |



ARIZONA

Statistical Overview

Acres of public land	11.7 million acres
Acres inventoried for cultural properties (FY 2002)	27,454 acres
Acres inventoried for cultural resources (to date)	759,817 acres
Cultural properties recorded (FY 2002)	276 properties
Cultural properties recorded (to date)	10,978 properties
Cultural Resource Use Permits in effect (FY 2002)	51 permits
National Register of Historic Places listings (to date)	19 listings
National Register of Historic Places contributing properties	362 properties
Section 106 class III undertakings (FY 2002)	255 undertakings
Section 106 data recovery, projects (FY 2002)	27 projects
Section 106 data recovery, properties (FY 2002)	76 properties
Interpreted places	18 places

Cultural Resources

1. Program Summary

In Arizona, BLM manages some of the most important and best preserved prehistoric and historic archaeological sites in the American Southwest. These sites span the entire range of human occupation in the New World, from 13,000 years ago to the present. They include properties as diverse as Paleo-Indian mammoth kill sites, Archaic hunting camps, giant ground figures (intaglios), pueblo ruins, rock art, ghost towns, historic ranches,

These sites span
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the present.



A pueblo ruin on top of the Vermilion Cliffs.



The Paleo-Indian
Clovis people,
the earliest
known settlers
of Arizona,
arrived in the
area at least
12,000 years
ago...



A mammoth bone wrench
found at Murray Springs
Clovis site.

and numerous historic trails and wagon roads such as the Butterfield Overland Stage route. Nineteen individual properties and Districts are listed on the National Register of Historic Places, and one is a National Historic Landmark. More than 750,000 acres of Arizona public land have been inventoried for cultural resources and nearly 11,000 sites recorded. Eighteen cultural properties are interpreted and developed for public visitation.

Twelve Areas of Critical Environmental Concern, comprising nearly 227,000 acres, were designated entirely or partly to provide for the protection of cultural resources. Three National Conservation Areas—San Pedro Riparian, Gila Box Riparian, and Las Cienegas—contain numerous significant cultural properties, including the Lehner mammoth kill site, a National Historic Landmark. In 2000 and 2001, five new national monuments were designated, providing special protection and recognition to approximately 2 million acres of BLM-administered lands containing hundreds of highly important cultural properties such as pueblo ruins, hunting camps, villages, trails, prehistoric agricultural fields, rock art, and other remains of Arizona's past.

2. State Cultural History

The Paleo-Indian Clovis people, the earliest known settlers of Arizona, arrived in the area at least 12,000 years ago (10000 B.C.), near the end of the Pleistocene period (Ice Age). These people used distinctive spear points to hunt the huge animals, such as mammoths, which populated the land during this cool, wet period.

By 6000 B.C., warmer and drier conditions contributed to the extinction of the large Pleistocene animals. People adapted to these changes with a new way of life, which lasted for thousands of years and was known as the Archaic period. The Archaic people hunted and gathered a wide variety of plants and animals and operated within far-flung social and trading networks. Towards the end of the Archaic period, many groups began adopting agriculture to supplement their other foods.

These early farmers lived in settled villages and by A.D. 0 (2,000 years ago) the Formative period was underway. Pottery, irrigation, larger villages, and distinctive societies emerged



during this time. The Hohokam constructed large irrigation canals along the rivers of the southern Arizona desert, the Mogollon lived in the mountains and valleys of eastern Arizona, ancestral Puebloans occupied the Colorado Plateau and the Arizona Strip regions, and the Patayan inhabited the Colorado River and desert areas in the west. Modern tribes, including the Hopi and the O'odham, are descendants of these people. About A.D. 1400, other groups, such as the Navajo, Apache, and Paiute, migrated into Arizona as well.

Farming societies flourished, and by A.D. 1100, they included socially and politically complex towns of hundreds or thousands of people living in multiroom pueblos. Eventually groups abandoned villages in valleys and aggregated into larger, more defensible settlements in upland areas or remote canyons. Such settlements included pueblos on Perry Mesa that are now managed within the Agua Fria National Monument. There are signs of warfare during this time, and by A.D. 1450, the inhabitants abandoned many of these settlements and migrated to other regions.

The Spanish arrived in Arizona in 1540 with Coronado's expedition. Others followed, establishing missions, introducing European livestock and crops, and bringing foreign diseases, which may have caused dramatic declines in Indian populations. In 1775, Captain Juan Bautista de Anza led a colony of settlers to California along the Santa Cruz and Gila Rivers, passing by Painted Rocks. His route is now designated as a National Historic Trail managed in part by the BLM. In 1776, construction began on the Presidio of Santa Cruz de Terrenate, now a historic site managed by BLM, to guard the northern border of New Spain.

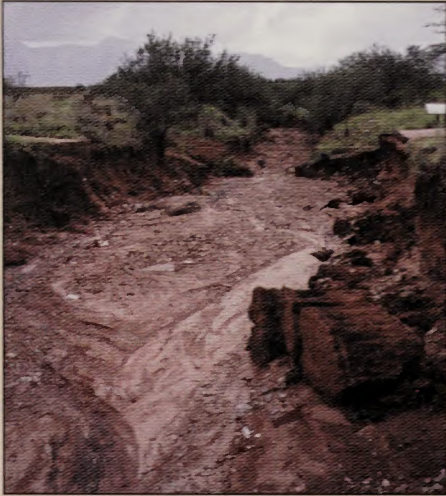
American "mountain men," including Jedidiah Smith and Kit Carson, trapped and traveled through Arizona in the early 1800s. They were followed by a major influx of Americans after the United States acquired the territory through the war with Mexico in 1848 and the Gadsden Purchase in 1854. These immigrants linked themselves to their eastern homes with transportation networks including the Butterfield Overland Stage route, which is still traceable on BLM lands. Conflicts with Indians resulted in numerous skirmishes from the 1860s to the 1880s and the creation of Indian reservations during this time. Approximately three dozen military camps and forts were established in Arizona between 1865 and 1920.



A 14th-century pueblo ruin in the Agua Fria National Monument.

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A portion of the Murray Springs Clovis site collapsed into the wash from erosion (on right).

Erosion
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including historic
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The Spaniards introduced cattle in the 17th century, and ranching has been important in Arizona ever since. BLM manages significant pieces of this ranching history, such as the 19th century adobe headquarters of the Empire Ranch, now one of BLM's most important historic properties. Rich strikes of silver and gold led to a mining boom in the 1860s, which twice doubled Arizona's population during that decade. By 1888, copper mining dominated silver and gold; it has remained a mainstay of Arizona's economy.

3. Cultural Resources At Risk

- Rock art is being lost due to theft and vandalism, such as the shooting, paintballing, and chalking of sites on the Arizona Strip; removal of petroglyph boulders from the Black Mountain bajada; chiseling of petroglyphs from bedrock panels at the Warm Springs petroglyph site; and use of sledge hammers to break petroglyphs from boulders at Cocoraque Butte.
- Erosion threatens countless sites, including historic buildings, villages, and human burial sites. For example, erosion is harming prehistoric villages in the San Simon Valley; farm sites are being flooded in the Gila Box Riparian National Conservation Area; and channel erosion threatens the world-class Murray Springs Clovis site, where a large section of the site was lost in a recent flash flood.
- Looting and vandalism of villages, rock shelters, historic buildings and other sites are a continuing problem. Sites damaged by digging, artifact collecting, shooting, illegal occupancy, trash dumping, use of metal detectors, and in some cases, blasting include the McHeffy Butte Rock Shelter, Canyon Station stage stop, Times Gulch Cabin, the Presidio Santa Cruz de Terrenate, and pueblo sites in the Agua Fria National Monument and adjacent Bumble Bee area. Historic graves have been looted at the Richardson Homestead, Carrow-Stephens Ranch, and elsewhere.
- Off-highway vehicle use and increasing visitor use contribute to surface collecting of fragile archaeological sites and open new areas to vandalism and artifact collecting. Areas of high resource values and special

designations receive especially heavy use, such as the Gila Box Riparian National Conservation Area, Aravaipa area, Muleshoe area, and much of Apache and Navajo Counties. Segments of historic trails, railroad grades, and roads, including the Butterfield Overland Stage route, are being damaged by off-highway vehicle use. Fragile intaglios, rock alignments, and aboriginal trails on desert pavement are threatened, particularly in the western desert and along the Colorado River. The Incline Railway in the Cunningham Mining District, one of the last intact structures of its kind in Arizona, is threatened by newly created access.

- Numerous prehistoric and historic standing structures are in danger of collapse from the effects of weathering. Standing walls of pueblo ruins on the Vermilion Cliffs are deteriorating, structures and features associated with the Harquahala Peak Smithsonian Observatory and the historic Swansea Townsite are being lost, the Beecher Well Cabin is collapsing, and the Fairbank Historic Townsite buildings are threatened by structural failures.
- The integrity of cultural landscapes, such as the Mojave Trail/Beale Wagon Road, is being jeopardized by encroaching developments, trash dumping, and off-highway vehicle use. The cultural landscape of the Agua Fria National Monument is threatened by proposed developments in private inholdings, including a communications tower. Public safety issues on abandoned mine land and mitigation measures threaten the archaeological landscapes of historic mining districts.

4. Major Accomplishments

- Interpreted a 13,000-year-old mammoth kill site with the assistance of a State Heritage Fund trails grant and volunteer labor.
- Received a Millennium Grant for the Empire Ranch to stabilize and reuse the adobe buildings of this historic cattle ranch; established a partnership with the Empire Ranch Foundation, a private, nonprofit, local group, to raise funds and research the history of the Ranch.
- Recorded 125 American Indian rock art sites on the Arizona Strip in partnership with the Sierra Club.

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Serna Cabin before and after restoration.

The tribes in
Arizona are
a major cultural
presence in the
State and have
strong ties to
the land BLM
now manages.



A petroglyph from Agua Fria
National Monument.

- Received an Arizona Off-Highway Vehicle Recreation Fund grant to conduct an earthen architecture workshop, which stabilized buildings at the historic copper-mining town of Swansea. Received the 1999 Arizona Heritage Preservation Award for this effort.

5. Ethnic, Tribal, and Other Groups to Whom BLM Cultural Resources Are Important

There are 21 federally recognized Indian tribes in Arizona. Indian reservations occupy more than one-quarter of the State's land. More than half of the reservation land held in trust for tribes by the U.S. Government is in Arizona, and nearly a fifth of the American Indians who live on reservations in the United States live on reservations in Arizona. The tribes in Arizona are a major cultural presence in the State and have strong ties to the land BLM now manages. Because of this rich Native American heritage and the tribes' keen interest in the lands they traditionally occupied, BLM's responsibilities for coordination and consultation are particularly challenging.

BLM also manages many historic period sites that are important to other groups whose cultures have intersected to create the social and political entity that became Arizona. Hispanic American history is reflected in sites such as the Presidio of Santa Cruz de Terrenate. Mormon history is reflected in sites such as the Honeymoon Trail. Former residents and their descendants still hold reunions at the historic townsite of Fairbank. There are Basque sheepherding camps in the Agua Fria National Monument and the Black Canyon area, and the remains of Chinese American farms and homesites within the Gila Box and San Pedro Riparian National Conservation Areas. Civilian Conservation Corps camps played a role in the past of many Arizonans, as has the military. Anglo American contributions to the State's ranching and mining history can be seen at Carrow-Stephens Ranch, the Empire Ranch, and Swansea. African American homestead sites have been recorded on public lands on the Ranegras Plain. Cultural properties and places important to these and other groups will continue to be identified as more inventories are carried out on the public lands.

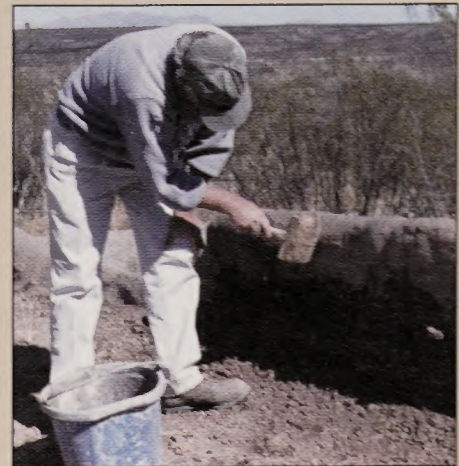
6. Existing Partnerships

- State Historic Preservation Office to promote Arizona's landmark Archaeology Month program, the most



comprehensive public awareness program in the country, in response to the high public interest in Arizona's cultural resources.

- Other agencies and tribes for Arizona's Site Steward program. This program has 670 volunteers monitoring archaeological and historic sites to detect and deter theft and vandalism. Volunteers contributed more than 13,000 hours to BLM over the last 3 years.
- U.S. Forest Service, National Park Service, and members of the Ute, Paiute, Navajo, and Hopi Tribes, for development of a nationwide program called Project Archaeology, which provides hands-on activities to educate children about cultural resources stewardship. Through a partnership with the Statistical Research Foundation, this ongoing program provides materials and training to help teachers incorporate archaeology and history into their curriculums.
- State Historic Preservation Office, Arizona State University, Arizona State Museum, and the Museum of Northern Arizona for development of a statewide automated cultural resource database called AZSITE for land managers, contractors, and others to access for efficient management, planning, and implementation of cultural resource laws.
- Civil Air Patrol, through a cooperative agreement, to monitor archaeological sites such as those on the Arizona Strip and on Perry Mesa within the Agua Fria National Monument.
- Four Corners Heritage Council, in partnership with the National Park Service and the States of Arizona, Utah, Colorado, and New Mexico, to manage and promote the wide array of cultural resources in the Four Corners area.
- Arizona State Parks to create Dankworth Village Outdoor Classroom, which is a very popular field exhibit of replicated archaeological sites accompanied by an activity guide for teachers and students.
- Numerous individuals, agencies, and organizations, through cost-share agreements, to carry out a wide range



A volunteer applies protective mud coating to an adobe wall of Presidio Santa Cruz de Terrenate.

Volunteers
contributed
more than
13,000 hours
to BLM over the
last 3 years.





Stabilization of the historic Swansea Townsite Railroad Depot.

Because Arizona
is so rich in
historic and
prehistoric sites,
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surprising that
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increasingly
important issue
for BLM.

of cultural-resource-oriented efforts. These partners have contributed more than \$1.6 million in funds, materials, and labor to BLM over the last 7 years, matching BLM contributions by a ratio of five to one.

7. Economic Benefits

Because Arizona is so rich in historic and prehistoric sites, it is not surprising that heritage tourism is becoming an increasingly important issue for BLM. Tourism is the second largest industry in Arizona, and its economic impact to the State has more than doubled in the last 15 years. It currently creates more than 283,000 jobs and generates more than \$312 million in State tax revenue each year. With Arizona's visually impressive ruins, rock art, and ghost towns, tourism is even more of a draw than it is in many other States. In fact, nearly 60 percent of the people who visit Arizona tour historic sites, which is more than twice the national average. A 1997 study by the Arizona Humanities Council showed that cultural heritage tourists spend an average of \$1,534 during their stay in the State, as compared to \$389 for typical travelers, and their propensity to shop is 20 percent greater. On the average, cultural heritage tourists stay 13 days in Arizona, four times longer than typical tourists. The economic contributions made by selected BLM cultural heritage sites can be roughly estimated using the data for 31 sites recorded in BLM's Recreation Management Information System, which yields an estimate of \$1,134,688 for fiscal year 1999.

Paleontological Resources

1. Program Summary

Paleontological research and collection in Arizona began in the late 1800s and has continued through the early 1900s to the present. The paleontology program in Arizona has grown steadily over the past decade with a focus on new areas of discovery and increased public interest in paleontological resources. Currently there are three active paleontological collecting permits in the State. On the nearly 12 million acres of BLM-managed surface in Arizona, two areas are specifically designated to protect paleontological values: Bear Springs Badlands and 111 Ranch Areas of Critical Environmental Concern.

2. State Paleontological History

The paleontology of Arizona reflects a time scale from Permian/Triassic-age reptiles and dinosaurs that lived 200 to 280 million years ago to more recent and recognizable fossils of animals such as mammoths, camels, bison, and saber-toothed cats from 20 million years to the more recent past of 12,000 years ago. Some of these areas contain fossil records that are the richest and best known in the world and provide researchers with critical information about the evolution of these faunas. In several cases, fossils of more recent animals underlie and overlap the time period of the first humans in North America and provide important information about that association.

3. Paleontological Resources at Risk

Resources at risk are primarily within the two Areas of Critical Environmental Concern managed by the Safford Field Office. These areas contain the fossils of Pliocene and Pleistocene mammals such as primitive elephants (gomphotheres), horses, camels, bears, hyenas, cats, and wolves. These fossils represent one of the best assemblages of late Pliocene and early Pleistocene mammals in the Southwest.

4. Major Accomplishments:

- Discovered a new eagle species fossil.
- Excavated a mammoth skull with the cooperation of a local quarry operator.
- Collected fossils of a large armadillo-type animal called a glyptodont.
- Documented tracks of ancient camels and horses that lived about 5 million years ago.

5. Existing Partnerships

- Mesa Southwest Museum of Natural History.

6. Economic Benefits

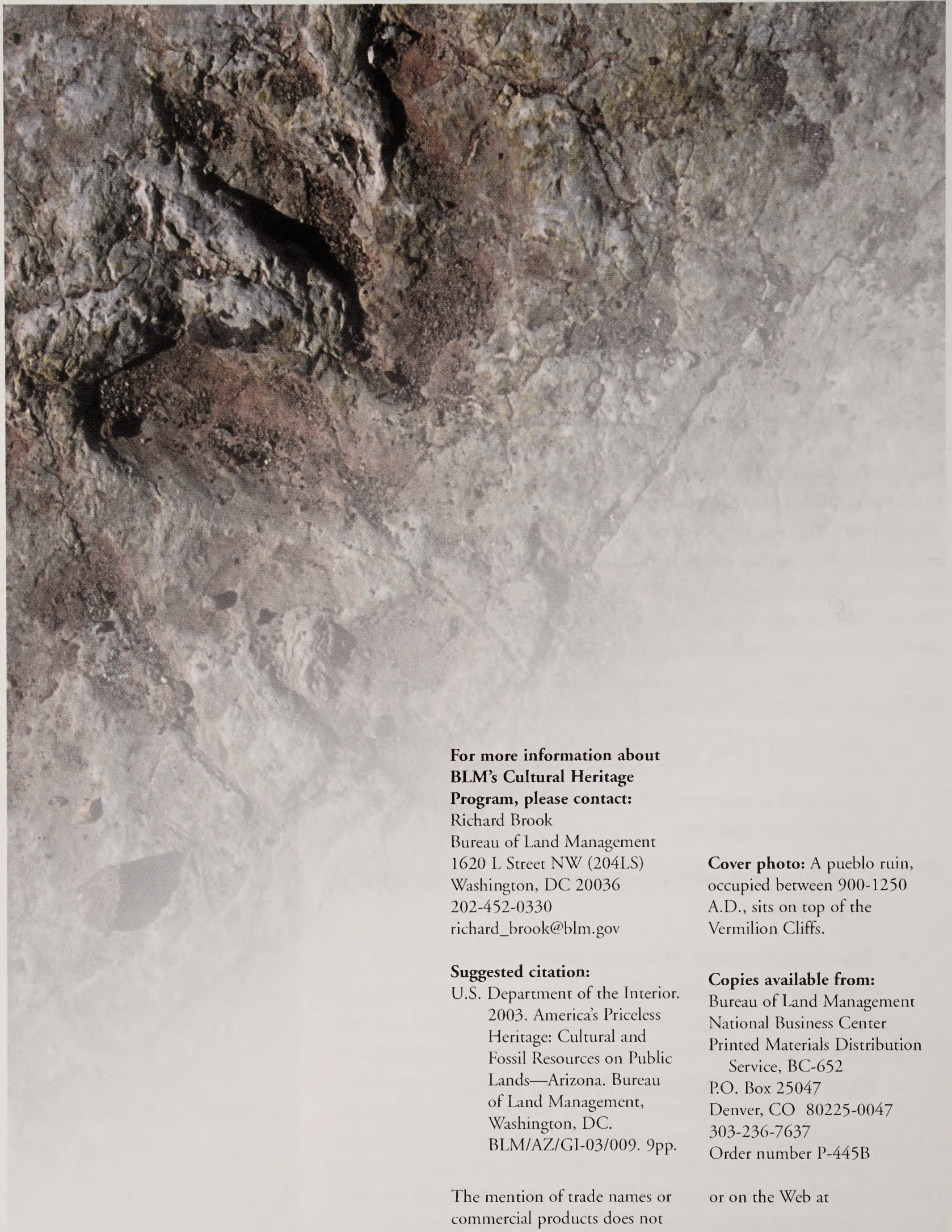
The primary factors for economic benefits in Arizona are its two major museums of natural history. These institutions attract both in-state and out-of-state visitors, generating returns similar to those of Arizona's cultural heritage resources.

Some of these areas contain fossil records that are the richest and best known in the world and provide researchers with critical information about the evolution of these faunas.



A giant land tortoise from the late Pliocene in southern Arizona.





**For more information about
BLM's Cultural Heritage
Program, please contact:**

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Cover photo: A pueblo ruin,
occupied between 900-1250
A.D., sits on top of the
Vermilion Cliffs.

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The Bureau of Land Management *Today*

Our Vision

To enhance the quality of life for all citizens through the balanced stewardship of America's public lands and resources.

Our Mission

To sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

Our Values

To serve with honesty, integrity, accountability, respect, courage, and commitment to make a difference.

Our Priorities

To improve the health and productivity of the land to support the BLM multiple-use mission.

To cultivate community-based conservation, citizen-centered stewardship, and partnership through consultation, cooperation, and communication.

To respect, value, and support our employees, giving them resources and opportunities to succeed.

To pursue excellence in business practices, improve accountability to our stakeholders, and deliver better service to our customers.

